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David Ailor <dailor@accci.org>
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To: OIRA_bc_rpt@omb.eop.gov
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Subject: ACCCI's Response to OMB-OIRA's February 20, 2004, Request for Nominations of Regulatory Reforms Relevant to the Manufacturing Sector (69 Fed. Reg. 7987)

Dear Sir or Madam:

On February 20, 2004, OMB-OIRA published a "Notice of Availability and Request for Comments" in the Federal Register relative to OMB-OIRA's Draft 2004 Report to Congress on the Costs and Benefits of Federal Regulations (69 Fed. Reg. 7987). Attached to this e-mail (**see "052004 ACCCI Comment Ltr.pdf"**) is a May 20 letter from me to Ms. Lorraine Hunt of OMB-OIRA setting forth the comments of the American Coke and Coal Chemicals Institute (ACCCI) on this Notice.

Please contact me if you have any questions. David Ailor
- 052004_ACCCI_Comment_Ltr.pdf



American Coke and Coal Chemicals Institute

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Website: www.accci.org

May 20, 2004

Via Electronic Mail

Lorraine Hunt
Office of Information and Regulatory Affairs
Office of Management and Budget
NEOB, Room 10202
725 17th Street, N.W.
Washington, DC 20503

Re: ACCCI's Response to OMB-OIRA's February 20, 2004, Request for Nominations of Regulatory Reforms Relevant to the Manufacturing Sector (69 Fed. Reg. 7987)

Dear Ms. Hunt:

On February 20, 2004, the Office of Information and Regulatory Affairs (OIRA) of the Office of Management and Budget (OMB) published a "Notice of Availability and Request for Comments" in the Federal Register relative to OMB-OIRA's Draft 2004 Report to Congress on the Costs and Benefits of Federal Regulations (69 Fed. Reg. 7987, February 20, 2004). One particular item on which OMB-OIRA requested comments is discussed in Chapter II of the Report ("Regulations and Manufacturing"). At the conclusion of this chapter OMB-OIRA requests public nominations of regulatory reforms relevant to the manufacturing sector. The American Coke and Coal Chemicals Institute (ACCCI) submits these comments to OMB-OIRA in response to this request for nominations.

ACCCI is a nonprofit trade association that represents independently owned and operated "merchant" companies that produce metallurgical coke (both furnace and foundry coke); integrated steel companies that produce metallurgical coke; producers and processors of chemicals derived from the distillation of coal and coal tar; coke sales agents; and, suppliers to these producers and processors.

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Chapter II of OMB-OIRA's February 20 "Notice of Availability and Request for Comments" states that "... commenters are requested to suggest specific reforms to regulations, guidance documents or paperwork requirements that would improve manufacturing regulation by reducing unnecessary costs, increasing effectiveness, enhancing competitiveness, reducing uncertainty and increasing flexibility." Two distinct regulatory programs with which ACCCI and its members have a great deal of experience and which we believe are in need of reform are discussed below:

1. EPA's "Compilation of Air Pollutant Emission Factors" (AP-42).

This document, which is more commonly known as "AP-42," is the recommended source of air pollutant emission factors for both criteria and hazardous air pollutant (HAP) emissions. It was first published by the U.S. Public Health Service in 1968. EPA now publishes and maintains the document.

The first through fourth editions, including supplements, are available at <http://www.epa.gov/ttn/chief/ap42/index.html> . In September 1985, the fourth edition was split into two volumes. Volume I, which is published and maintained by EPA's Office of Air Quality Planning and Standards (EPA-OAQPS), focuses on stationary point and area source emission factors, including coke plants. Volume II, which is published and maintained by EPA's Office of Transportation and Air Quality (EPA-OTAG), includes mobile source emission factors. Volume II is available on the EPA-OTAG web site (<http://www.epa.gov/otag/ap42.htm>).

As discussed in the attached "Question and Answer" document that ACCCI developed and submitted to EPA last fall (see Attachment 1), the coke industry, like many industries, uses emission factors to estimate emissions of criteria air pollutants and HAPs in support of many federal, state, and local air regulatory programs and applications. These may include, but are not limited to, the following:

- a. Annual emission fee reports
- b. Annual emission statements for nonattainment areas (e.g., NOX/VOC Emission Statements for ozone nonattainment areas)
- c. SARA Title III, Section 313 Toxic Release Inventory (TRI) Form Rs
- d. Title V air permit applications

- e. Construction/operating permit applications
- f. New Source Review (NSR) applicability (e.g., PSD netting analyses) and NSR permit applications
- g. New Source Performance Standard (NSPS) applicability
- h. Maximum Achievable Control Technology (MACT) applicability
- i. Permit compliance demonstrations and Compliance Assurance Monitoring (CAM) requirements
- j. Development of national and regional emission inventories (e.g., National Toxics Inventory, EPA Integrated Urban Air Toxics Strategy, Canada-United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes Basin (Binational Toxics Strategy))
- k. Section 112 residual risk analyses

The coke industry believes that the AP-42 program serves a valuable purpose and should be continued. However, the AP-42 emission factor development, documentation, and implementation process needs to be improved, so as to provide greater stakeholder involvement and a firmer schedule for EPA response and issue resolution.

One excellent example of the urgent need for process improvements is the "Coke Production" section (Section 12.2) of AP-42. This section has been under revision by the Agency for nearly 10 years now. The industry has no idea if, or when the section, which has been posted in draft form on the above referenced EPA-OAQPS website for a number of years, will ever be finalized. Nonetheless, the industry faces on an ongoing basis the use of the draft emission factors in the many federal, state, and local air regulatory programs and applications cited above.

The coke industry would welcome the opportunity to have greater involvement in the AP-42 emission factor development process. Our suggested involvement would take the form of regular submittal of industry source test reports and greater involvement in the review and interpretation of test data, including participation in a stakeholder "work group" to help resolve issues and finalize data.

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2. OSHA's Coke Oven Emissions (COE) Standard (29 CFR 1910.1029).

29 CFR 1910.1029 is an OSHA standard that applies to the control of employee exposure to coke oven emissions. As a result of a number of factors, including the development of new technology, the obsolescence of antiquated technology and the results of 25 years of exposure monitoring data, this Standard is in need of major revision.

ACCCI's efforts towards the Standard being revised date back nearly 10 years. Most recently, on January 30, 2003, ACCCI submitted comments to OSHA (see Attachment 2) in response to an October 31, 2002, rule proposed by the Agency entitled "Standards Improvement Project--Phase II" (SIP-II) (67 Fed. Reg. 66494). Phase I of the SIP, by which OSHA removed and revised provisions of its standards that were outdated, duplicative, unnecessary, or inconsistent, was completed by the Agency in June 1998 with the publication of a final rule in the Federal Register. In Phase II, OSHA proposed to revise a number of health provisions in its standards for general industry, shipyard employment, and construction.

The Agency believed that the proposed revisions would streamline these provisions. In some cases, OSHA proposed to make substantive revisions to provisions, including the COE Standard, that would reduce regulatory requirements for employers while maintaining employee protection. ACCCI's comments were specific to the rule's proposed revisions relating to 29 CFR 1910.1029, Coke Oven Emissions.

Revising of the COE Standard as ACCCI has suggested (see the Enclosure to Attachment 2) would do nothing to lessen the protection afforded by the Standard. However, it would be of great benefit to the industry in terms of more effective utilization of the limited resources it has available at a time when the future of many companies is in serious doubt.

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ACCCI greatly appreciates the opportunity being provided by OMB-OIRA to
nominate regulatory programs which we believe are in need of reform.
Thank you for OMB-OIRA's serious consideration of the two nominations
ACCCI has made. Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Ailor". The signature is fluid and cursive, with a large initial "D" and "A".

David C. Ailor, P.E.
Director of Regulatory Affairs

Two Attachments

ATTACHMENT 1

COKE OVEN ENVIRONMENTAL TASK FORCE “WHITE PAPER” ON THE EPA/OAR/EMAD “EMISSIONS FACTORS IMPROVEMENT AND APPLICATIONS PROJECT”

Prepared by:

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Introduction

The Emissions Monitoring and Analysis Division (EMAD) of EPA-OAQPS is reviewing and reassessing the current emission factor development process, documentation, applications, implementation tools, and guidance. In late August, 2003, Peter Westlin of EMAD, seeking stakeholder feedback on how emission factors are used, the types of emission factors and other emission estimation methods used, and ways to improve the AP-42 emission factor development process, provided ACCCI with a draft Agency solicitation entitled “EPA/OAR/EMAD Emissions Factors Improvement and Application Project.” In this solicitation, EPA listed a number of fact finding goals and nine questions on emission factor development and application.

This “white paper” document was prepared on behalf of the Coke Oven Environmental Task Force (COETF) to address these issues. In particular, this document provides answers to the nine questions listed on the EPA solicitation and emphasizes the coke industry’s concerns on: 1) the quality of AP-42 emission factors; 2) problems with the current AP-42 emission factor development process and how the process could be improved (e.g., more direct involvement by the coke industry in the development of AP-42 emission factors, greater reliance on more recent source test data which better reflect current industry control technologies, work practices, and operations, etc.); 3) the need for alternative emission estimation methodologies for certain emission sources, such as technology transfer applications from other related industries (e.g., the crushed stone industry for solid materials handling operations, the petroleum refinery industry for byproduct recovery plant equipment leak emissions, etc.); and 4) industry experience with state and local air pollution control agencies on the application of AP-42 or other emission factors.

Answers to EPA Questions

The COETF’s responses to nine questions raised in the EPA solicitation are provided below:

1. *How do you or your constituents use emission factors (e.g., inventories, permit applicability, compliance)?*

The coke industry uses emission factors to estimate emissions of criteria air pollutants and Hazardous Air Pollutants (HAPs) in support of many federal, state, and local air regulatory programs and applications. These may include, but are not limited to, the following:

- a) Annual emission fee reports
- b) Annual emission statements for nonattainment areas (e.g., NOX/VOC Emission Statements for ozone nonattainment areas)
- c) SARA Title III, Section 313 Toxic Release Inventory (TRI) Form Rs
- d) Title V air permit applications
- e) Construction/operating permit applications
- f) New Source Review (NSR) applicability (e.g., PSD netting analyses) and NSR permit applications
- g) New Source Performance Standard (NSPS) applicability
- h) Maximum Achievable Control Technology (MACT) applicability
- i) Permit compliance demonstrations and Compliance Assurance Monitoring (CAM) requirements
- j) Development of national and regional emission inventories (e.g., National Toxics Inventory, EPA Integrated Urban Air Toxics Strategy, Canada-United States Strategy for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes Basin (Binational Toxics Strategy))
- k) Section 112 residual risk analyses

2. *Are the emissions factors you or your constituents use derived from EPA's AP-42 or other data sources? What are those other sources?*

Although many of the emission factors used by the coke industry are derived from AP-42, a wide array of other sources of emission factors are used. These other sources may include, but are not limited to, the following:

- a) EPA Factor Information Retrieval (FIRE) Data System and SPECIATE data base
- b) EPA Protocol for Equipment Leak Emission Estimates (EPA-453/R-95-017)
- c) EPA Locating and Estimating series (e.g., Locating and Estimating Air Emissions from Sources of Benzene, EPA-454/R-98-011, June 1998)
- d) STAPPA/ALAPCO/EPA Emission Inventory Improvement Program
- e) The technical literature (e.g., Easterly, T.W. "Measurement Based Coke Oven Battery Emission Factors," presented at the Air & Waste Management Association Annual Meeting and Exhibition, San Antonio, TX, June 18-23, 1995; Air & Waste Management Association, Air Pollution Engineering Manual, Van Nostrand Reinhold, New York, 1992)

- f) Emission factor documents prepared by state air pollution control agencies (e.g., Texas Natural Resource Conservation Commission, "Emission Calculation Instructions for Rock Crushing Facilities," January, 1994)
 - g) EPA NESHAP Background Information Documents (e.g., U.S. EPA, "Coke Oven Emissions from Wet-Coal Charged By-Product Coke Oven Batteries – Background Information for Proposed Standards," EPA-450/3-85-028a, April, 1987)
 - h) Site-specific emission factors based on source testing, engineering calculations, and/or unit-specific process design
3. *Do you use emissions factors from sources other than AP-42 because AP-42 does not provide factors for your source type or for other reasons?*

The coke industry uses emission factors from sources other than AP-42 for several reasons:

- a) AP-42 does not provide emission factors for all source types within coke plants (e.g., plant vehicles)
- b) More accurate emission estimates are available through use of alternative emission factor sources, including technology transfer applications from related industries (e.g., equipment leak VOC and volatile HAP emission factors from the petroleum refinery industry; solid materials storage and handling emission factors from the crushed stone industry).

Additional generic emissions factors (as opposed to industry-specific emissions factors) could be helpful. As an example, Chapter 5, Petroleum Industry, includes a section on "Transportation and Marketing of Petroleum Liquids." Treatment of the topic in a more generic format would have applicability to organic chemicals, coke by-products plants, and other industries. The generic format would require categorizing materials and calculating emissions in terms of their characteristics instead of by names such as "Gasoline," Jet Naphtha," and "Jet Kerosene."

4. *To what extent does the use of emission factors satisfy the needs of the military or other government facilities in your area or constituency in obtaining and complying with operating, NSR, or other permits and in meeting emissions monitoring needs?*

This question is not applicable to the coke industry.

5. *Do you or your constituents provide data to EPA for developing emissions factors? What about the process for developing EPA emissions factors enhances or inhibits your participation?*

Over the past several decades, the coke industry has supplied numerous source test reports to EPA as part of the AP-42 review/comment process. Many of these reports have been used by EPA in the development of AP-42 emission factors and

as a basis for coke industry emission standards (e.g., 40 CFR 61 Subpart L – National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants; 40 CFR 63 Subpart L – National Emission Standards for Coke Oven Batteries). Although the coke industry is supportive of the opportunity afforded by EPA to participate in AP-42 emission factor development, there are a number of problems with this process:

- a) Industry involvement is inhibited by the infrequent opportunities granted by EPA in supplying these test data and in commenting on EPA's use of the data. EPA should offer more opportunities for data/comment submittal.
- b) EPA has not been particularly responsive in providing feedback to the coke industry on the test data and comments supplied. The process for expanding and revising AP-42 is far too long; incorporating industry test data into AP-42, even when done in coordination with EPA, takes years. Over the past eight years, EPA has issued two drafts of AP-42 Section 12.2 – Coke Production, during which the coke industry has had little opportunity to interact with EPA on emission factor development. Due to EPA's lack of responsiveness, many AP-42 emission factors are disproportionately weighted by outdated source test results. These are often not representative of current industry operations and do not account for the significant emission reductions resulting from the promulgation of more stringent emission limits (e.g., NESHAP controls for HAP emissions). There is a strong need for more timely and firmer schedules for response and issue resolution.
- c) The issue resolution process is not effective. There is a need for a more transparent process, more stakeholder involvement, and greater EPA accountability. EPA has regularly listed draft, non-peer-reviewed AP-42 emission factors on its Technology Transfer Network (TTN) web site for use by stakeholders. State/local regulatory agencies and other stakeholders tend to use these draft emission factors, leading to misinterpretations and inappropriate applications. A "work group" approach to resolving issues and finalizing test data and the resultant emission factors probably would be more effective.
- d) AP-42 lacks a needed statement on every page that site-specific emissions data are preferable to category-wide average emission factors for regulatory applicability and permitting applications.
- e) In some cases, EPA has misused/misinterpreted the test data supplied by industry, resulting in highly inaccurate emission factors which are not representative of current industry operations. Several examples of this misuse/misinterpretation of test data are cited below:
 - i) In the July 2001 Revised Draft AP-42 for the coke industry, EPA developed an emission factor equation for coke oven door leaks which is not based on a valid model and is not supported by reliable data. EPA developed an algorithm for coke oven emissions from non-visibly leaking doors based on

a 1991 emissions test program conducted on empty coke ovens. In developing this algorithm, EPA failed to recognize the analytical detection limit problems encountered in the program, the sources of interference due to coke oven emissions (COE) from background sources, the internal inconsistency of the analytical particulate matter and COE samples, and problems with the sample blanks. By design, the test program was conducted with empty ovens that were under significantly negative pressure; no measurable emissions could have occurred under these conditions.

- ii) The July 2001 Revised Draft is also flawed in that it lists pollutant emission factors which are internally inconsistent. For example, in Table 12.2-9, the VOC emission factor for coke oven pushing is listed as 0.077 lb/ton coal charged. The same table lists an emission factor for benzene, which is a component, or subset, of VOC, of 0.73 lb/ton coal charged, which is a factor of 9.5 higher than the VOC emission factor. This inconsistency results from the fact that different emission factors were developed from limited and different sets of source test results. The possible misuse of HAP emission factors, such as the benzene factor cited above, can have a major impact on regulatory applicability determinations, residual risk estimates/determinations, and other emission factor applications.

6. *Have you, your constituents, or others proposed to use emissions quantification procedures other than emissions factors. If so, why and what were those procedures?*

The coke industry regularly uses emissions quantification procedures other than emission factors, in order to obtain refined emission estimates which incorporate facility-specific operating data/information. These procedures may include, but are not limited to, the following:

- a) the EPA TANKS program for estimating emissions from coke byproduct recovery plant storage tanks and process vessels;
- b) surface impoundment and wastewater treatment plant models, such as the Surface Impoundment Modeling System (SIMS) and WATER9 Model;
- c) the Coke Oven NESHAP BID correlation equations for estimating benzene soluble organic (BSO) coke oven emissions from coke oven charging operations, door leaks, and topside leaks;
- d) the EPA equipment leak protocol document correlation equations which relate EPA Test Method 21 screening concentrations to total hydrocarbon mass emission rates;
- e) engineering calculations incorporating process unit design,

- f) facility-specific source test data and test data from related operations at other coke plants; and
- g) mass balance (e.g., VOC and volatile HAP emissions from the use of coke oven lid sealant and organic solvents).

7. *Have you, your constituents, or others imposed or had imposed on you the use of emissions factors when there may have been other procedures providing more representative results?*

The coke industry has, on numerous occasions, had emission factors imposed by federal, state, and local air pollution control agencies in cases where other emission quantification procedures were more representative. Frequent misuse of emission factors by these agencies has occurred in the assessment of annual emission fees and in the specification of construction/operating permit emission limits. Emission factors, by definition, are derived as averages of source test data and, as such, are not appropriate for use in establishing short-term (e.g., hourly) emission limits. Emission factors do not account for the short-term variability in emissions and, accordingly, will generally result in short-term emission limits which are too low.

As stated earlier, the EPA practice of posting draft, non-peer-reviewed AP-42 emission factors has resulted in the misuse of emission factors by various stakeholders, including regulatory agencies. Many AP-42 emission factors are of poor quality (i.e., are based on limited test data from a limited number of facilities, test data of questionable quality, and test data which are poorly documented). Emission factors based on limited test data from a non-representative sample of facilities do not account for the intra- and inter-plant variability in emissions resulting from: 1) variations in plant process design (e.g., type and degree of light oil recovery); 2) coal properties (e.g., volatility, sulfur content, etc.); 3) plant operating parameters (e.g., coking cycles and temperatures); 4) plant maintenance activities; and 5) physical plant layout.

For emission units having AP-42 emission factors of poor quality, alternative emission quantification procedures involving engineering judgment based on sound physical/chemical principles often provide greater technical accuracy than AP-42. In many cases, either available facility-specific source test data or test data from similar operations at other facilities provide more accurate emission estimates (e.g., AP-42 emission factors derived from test data from furnace coke plants are not appropriate for application to plants producing foundry coke, due to the use of different coals, coking cycles and temperatures, etc.) Industry experience in developing air emission inventories at different coke plants suggests that process unit operations are sufficiently variable such that industry-wide emission factors are often inappropriate for facility-specific applications.

8. *If EPA decided not to update AP-42 again, what would your reaction be?*

The coke industry believes that the AP-42 program serves a valuable purpose and should be continued. However, the AP-42 emission factor development, documentation, and implementation process needs to be improved, so as to provide greater stakeholder involvement and a firmer schedule for EPA response and issue resolution.

9. *Would you consider more direct involvement in an effort to improve emissions factors or in developing appropriate alternatives to emission quantification by emission factors? If so, what level of involvement would that be?*

The coke industry would welcome the opportunity to have greater involvement in the AP-42 emission factor development process. Our suggested involvement would take the form of regular submittal of industry source test reports and greater involvement in the review and interpretation of test data, including participation in a stakeholder “work group” to help resolve issues and finalize data.

ATTACHMENT 2



American Coke and Coal Chemicals Institute

1255 Twenty-Third Street, NW • Washington, DC 20037 • (202) 452-1140 • Fax: (202) 833-3636

Via Electronic Mail

January 30, 2003

Docket Office
Docket No. S-778-A
Room N-2625, OSHA
Department of Labor
200 Constitution Avenue, NW
Washington, DC 20210

**RE: 29 CFR Parts 1910, 1915 and 1926
OSHA's Standards Improvement Project – Phase II; Proposed
Rule [67 Fed. Reg. 66494, October 31, 2002 (Docket No. S-778-A)]**

Dear Sir or Madam:

On October 31, 2002, the U.S. Occupational and Health Administration (OSHA) issued a proposed rule entitled "Standards Improvement Project--Phase II" (SIP-II) (67 Fed. Reg. 66494). Phase I of the SIP, by which OSHA is removing and revising provisions of its standards that are outdated, duplicative, unnecessary, or inconsistent, was completed by the Agency in June 1998 with the publication of a final rule in the Federal Register. In Phase II, OSHA is proposing to revise a number of health provisions in its standards for general industry, shipyard employment, and construction. The Agency believes that the proposed revisions would streamline these provisions; in some cases, OSHA is making substantive revisions to provisions that would reduce regulatory requirements for employers while maintaining employee protection.

The American Coke and Coal Chemicals Institute (ACCCI) is a nonprofit trade association representing independently owned/operated "merchant" producers of metallurgical coke (both furnace and foundry coke); coke sales agents; steel manufacturers that produce coke; producers and processors of chemicals derived from the distillation of coal and coal tar; and, suppliers to these producers and processors. ACCCI represents 12 of the 19 coke plants and all 13 of the tar refining plants operating in the U.S. ACCCI also represents one Canadian coke producer and one Canadian tar refiner.

The following comments are ACCCI's response to the Agency's request for comment regarding SIP-II. They are specific to the rule's proposed revisions relating to 29 CFR 1910.1029, Coke Oven Emissions:

- **Paragraph (e)(3)(i) of 29 CFR 1910.1029.** ACCCI is in agreement with the proposed revisions to this section, as they would facilitate regulatory compliance without adversely affecting employee health. By increasing the notification period to 15 days, it not only provides consistency with other standards but also provides employers with the leeway to work through periods when employees may be away from work (i.e., vacations) and to coordinate any remedial testing that may be warranted by the initial results. Also, the modification of the notification process to include a posting of the results affords employers the flexibility to select the most effective method to communicate results. With respect to the Agency's request for additional comment regarding the possible inclusion of social security numbers in employee monitoring and surveillance records, ACCCI believes that such a revision would have merit, provided that it excludes any written notification, posting requirement, or both, which would serve to undermine individual privacies.
- **Paragraph (f)(6)(iv) of 29 CFR 1910.1029.** OSHA proposes to revise this section to reduce the requirement for the updating of written Compliance Plans for Engineering and Work Practice Controls from at least every six months to annually. ACCCI supports this revision, as it would have no diminishing effect on employee safety and health. Engineering controls are well established and maintained throughout the industry, and work practice controls remain regimented within individual cokemaking facilities. Furthermore, employee protection is ensured through related compliance with other applicable OSHA standards, such as Respiratory Protection (1910.134) and Personal Protective Equipment (1910.132).
- **Paragraph (j)(2)(ii) of 29 CFR 1910.1029.** ACCCI concurs with the Agency's research and rationale that the ILO-U/C rating is not suitable for the proper evaluation of standard posterior-anterior chest x-rays, as this designation does not promote proper lung cancer surveillance. In addition to the additional cost burden it imposes upon employers, this requirement also delays the reading response time, due to the extremely limited number of radiologists qualified to render such an interpretation.

- **Paragraphs (j)(3)(ii) and (j)(3)(iii) of 29 CFR 1910.1029.** ACCCI agrees with the Agency's position that semiannual medical exams do not enhance the detection time for cancer or other medical conditions that may arise from occupational exposures, and that the effectiveness of semiannual examinations become even less effective when the chest x-ray frequency is reduced. Additionally, ACCCI agrees that the current delineations based upon either employee age, duration of exposures, or both, should be revised to establish an annual exam requirement to cover all affected employees.

ACCCI strongly urges OSHA to revise the semiannual requirement for urinary cytology examinations. Employing the same logic used in the analysis of the need for the ILO-U/C rating on chest x-rays, we believe sufficient medical data exist to affirm that urinary cytology testing is not an effective means to detect bladder cancer in any frequency. However, it is an economically acceptable compromise to adopt annual dipstick urinalysis testing as a provisional measure in lieu of more valuable, future medical screening advances.

- **Paragraph (j)(3)(iv)) of 29 CFR 1910.1029.** ACCCI supports the Agency's proposal to delete this as predicated by previous Agency amendment.
- **Paragraph (j)(3)(v)) of 29 CFR 1910.1029.** ACCCI supports the Agency's proposal to re-designate this section as logical due to the removal of the previous paragraph.

ACCCI applauds OSHA for this well-conceived improvement initiative, which will reduce regulatory confusion and relieve unnecessary employer burden without compromising employee health and safety. We respectfully request, however, that the Agency consider revisiting a much-needed revision of 29 CFR 1910.1029, Coke Oven Emissions (COE). In consideration of a number of factors, including the development of new technology, the obsolescence of antiquated technology and the results of 25 years of exposure monitoring data, this standard is long overdue for an overhaul.

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Revising of the COE Standard as ACCCI is suggesting (see Enclosure) would do nothing to lessen the protection afforded by the Standard. However, it would be of great benefit to the industry in terms of more effective utilization of the limited resources it has available at a time when the future of many companies is in serious doubt. Preliminary work towards this goal was initiated by ACCCI with the previous administration. ACCCI would welcome the opportunity to once again forge a partnership with OSHA in an effort to improve the relevance of an outdated standard.

Thank you for your consideration of our comments. Please contact me if you have any questions

Sincerely

A handwritten signature in black ink, appearing to read "D. C. Ailor", written over a horizontal line.

David C. Ailor, P.E.
Director of Regulatory Affairs

Enclosure

ENCLOSURE

01/30/2003

1910.1029

Title Coke Oven Emissions.

Subpart Z

Subpart Title Toxic and Hazardous Substances

ACCCI's Proposed Revisions:

- ~~Strikethrough~~ means delete text.
- **Bold** means add text.

Proposed Revision of 29 CFR § 1910.1029	Rationale for the Proposed Revision
<p>(a) <i>Scope and application.</i> This section applies to the control of employee exposure to coke oven emissions, except that this section shall not apply to working conditions with regard to which other Federal agencies exercise statutory authority to prescribe or enforce standards affecting occupational safety and health.</p>	<p>No revisions are proposed</p>
<p>(b) <i>Definitions.</i> For the purpose of this section:</p> <p><i>Authorized person</i> means any person specifically authorized by the employer whose duties require the person to enter a regulated area, or any person entering such an area as a designated representative of employees for the purpose of exercising the opportunity to observe monitoring and measuring procedures under paragraph (n) of this section.</p> <p><i>Beehive oven</i> means a coke oven in which the products of carbonization other than coke are not recovered, but are released into the ambient air.</p> <p><i>Coke oven</i> means a retort in which coke is produced by the destructive distillation or carbonization of coal.</p> <p><i>Coke oven battery</i> means a structure containing a number of slot type coke ovens.</p>	<p>There are no beehive ovens operational in the steel/coke industry and none are expected in the future.</p> <p>This revision eliminates the reference to slot type ovens, as new technologies may not have slot ovens.</p>

<p><i>Coke oven emissions</i> means the benzene-soluble fraction of total particulate matter present during the destructive distillation or carbonization of coal for the production of coke.</p> <p><i>Director</i> means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health, Education, and Welfare, or his or her designee.</p> <p><i>Emergency</i> means any occurrence such as, but not limited to, equipment failure, which is likely to, or does, result in any massive release of coke oven emissions.</p> <p><i>Existing coke oven battery</i> means a battery in operation or under construction on January 20, 1977, and which is not a rehabilitated coke oven battery.</p> <p><i>Rehabilitated coke oven battery</i> means a battery which is rebuilt, overhauled, renovated, or restored such as from the pad up, after January 20, 1977.</p> <p><i>Secretary</i> means the Secretary of Labor, U.S. Department of Labor, or his or her designee.</p> <p><i>Stage charging</i> means a procedure by which a predetermined volume of coal in each larry car hopper is introduced into an oven such that no more than two hoppers are discharging simultaneously.</p> <p><i>Sequential charging</i> means a procedure, usually automatically timed, by which a predetermined volume of coal in each larry car hopper is introduced into an oven such that no more than two hoppers commence or finish discharging simultaneously, although at some point, all hoppers are discharging simultaneously.</p>	<p>This distinction is no longer needed.</p>
<p>(c) <i>Permissible exposure limit.</i> The employer shall assure that no employee in the regulated area is exposed to coke oven emissions at concentrations greater than 150 micrograms per cubic meter of air (150 ug/m³), averaged over any 8-hour period.</p>	<p>No revisions are proposed.</p>

<p>(d) Regulated areas. (1) The employer shall establish regulated areas and shall limit access to them to authorized persons. Wherever the Permissible Exposure Limit, as listed in paragraph (c) of this part is exceeded, the employer shall establish regulated areas and post signs to limit access to them to authorized persons.</p>	<p>This revision reflects technology changes and ensures consistency with OSHA program directives and other standards.</p>
<p>(2) The employer shall establish the following as regulated areas (i) the coke oven battery including topside and its machinery, pushside and its machinery, coke side and its machinery and the wharf, and the screening station.</p> <p>(ii) The beehive oven and its machinery.</p>	<p>There are no beehive ovens operational in the steel/coke industry and none are expected in the future.</p>
<p>(e) Exposure monitoring and measurement - (1) Monitoring program. (i) Each employer who has a place of employment where coke oven emissions are present shall monitor employees employed in the regulated area to measure their exposures to coke oven emissions.</p> <p>(ii) The employer shall obtain measurements which are representative of each employee's exposure to coke oven emissions over an eight-hour period. All measurements shall determine exposure without regard to the use of respiratory protection.</p> <p>(iii) The employer shall collect fullshift (for at least seven continuous hours) personal samples, including at least one sample during each shift for each job classification, occupation, position, or work regimen on each battery or operating unit, and each job classification, within the regulated areas, including at least the following job classifications-</p> <ul style="list-style-type: none"> —(a) Lidman; —(b) Tar chaser; —(c) Larry car operator; —(d) Luterman; —(e) Machine operator, coke side; —(f) Benchman, coke side; —(g) Benchman, pusher side; —(h) Heater; —(i) Quenching car operator; —(j) Pusher machine operator; —(k) Screening station operator; —(l) Wharfman; —(m) Oven patcher; —(n) Oven repairman; —(o) Spellman; and —(p) Maintenance personnel. 	<p>Extensive monitoring data show that there is no statistically significant inter-shift difference in exposure monitoring results. Sampling should be designed around how a crew works, rather than be specific to a battery.</p> <p>Job titles and technologies have changed; thus, listing detailed occupations is no longer relevant. Monitoring requirements would be consistent with other standards. The overall intent is to have exposure measurements that are representative of a set of duties that are performed routinely.</p>

<p>(iv) The employer shall repeat the monitoring and measurements required by this paragraph (e)(1) at least every three six months. The employer may discontinue monitoring for any job classification when three consecutive measurements of exposures representative of that job classification taken at least six months apart are below the permissible exposure limit.</p> <p>(v) The employer shall annually identify through observations and area or personal air monitoring the sources or practices that result in employee exposures exceeding the PEL.</p>	<p>Extensive monitoring data show that there is no statistically significant inter-seasonal difference in exposure monitoring results. Thus, semi-annual monitoring is sufficient. As in other Standards, monitoring should no longer be required after repeated measurements show that the PEL is not exceeded, unless there is a change warranting a re-determination under (e)(2) below.</p>
<p>(2) <i>Redetermination.</i> Whenever there has been a production, process, or control change which may result in new or additional exposure to coke oven emissions, or whenever the employer has any other reason to suspect an increase in employee exposure, the employer shall repeat the monitoring and measurements required by paragraph (e)(1) of this section for those employees affected by such change or increase.</p> <p>(3) <i>Employee notification.</i> (i) The employer shall notify each employee in writing of the exposure measurements which represent that employee's exposure within five working days after the receipt of the results of measurements required by paragraphs (e)(1) and (e)(2) of this section. Such notification may take the form of postings in a prominent location readily accessible to the affected employees.</p> <p>(ii) Whenever such results indicate that the representative employee exposure exceeds the permissible exposure limit, the employer shall, in such notification, inform each employee of that fact and of the corrective action being taken to reduce exposure to or below the permissible exposure limit.</p> <p>(4) <i>Accuracy of measurement.</i> The employer shall use a method of monitoring and measurement which has an accuracy (with a confidence level of 95%) of not less than plus or minus 35% for concentrations of coke oven emissions greater than or equal to 150 ug/m³.</p>	<p>This revision makes clear that written notification can be made by means of postings in prominent locations where they can be seen by the employees whose exposures the measurements represent.</p>

<p>(f) <i>Methods of compliance.</i> The employer shall control employee exposure to coke oven emissions by the use of engineering controls, work practices and respiratory protection as follows:</p>	<p>No revisions are proposed.</p>
<p>(f)(1) <i>Priority of compliance methods</i> (i) Existing coke oven batteries. (a) The employer shall institute the engineering and work practice controls listed in paragraphs (f)(2), (f)(3) and (f)(4) of this section in existing coke oven batteries at the earliest possible time, but not later than January 20, 1980, except to the extent that the employer can establish that such controls are not feasible or applicable to the battery design. In determining the earliest possible time for institution of engineering and work practice controls, the requirement, effective August 27, 1971, to implement feasible administrative or engineering controls to reduce exposures to coal tar pitch volatiles, shall be considered. Wherever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p> <p>—(b)(f)(1)(ii) The engineering and work practice controls required under paragraphs (f)(2), (f)(3) and (f)(4) of this section are minimum requirements generally applicable to all existing coke oven batteries. If, after implementing all controls required by paragraphs (f)(2), (f)(3) and (f)(4) of this section, or after January 20, 1980, whichever is sooner, employee exposures still exceed the permissible exposure limit, employers shall implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible exposure limit except to the extent that the employer can establish that such controls are not feasible. Whenever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p>	<p>There is no need to differentiate between existing batteries (current (f)(1)(i)) and new batteries (current (f)(1)(ii)).</p> <p>This revision updates the Standard.</p> <p>This revision updates the Standard.</p>

<p>(ii) New or rehabilitated coke oven batteries.</p> <p>(a) (f)(1)(iii) The employer shall institute the best available engineering and work practice controls on all new or rehabilitated coke oven batteries to reduce and maintain employee exposures at or below the permissible exposure limit, except to the extent that the employer can establish that such controls are not feasible. Whenever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p> <p>(b) If, after implementing all the engineering and work practice controls required by paragraph (f)(1)(ii)(a) of this section, employee exposures still exceed the permissible exposure limit, the employer shall implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible exposure limit except to the extent that the employer can establish that such controls are not feasible. Whenever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposure to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p>	<p>There is no need to differentiate between existing batteries (current (f)(1)(i)) and new batteries (current (f)(1)(ii)).</p> <p>This revision updates and simplifies the Standard.</p>
<p>(iii) Beehive ovens</p> <p>a) The employer shall institute engineering and work practice controls on all beehive ovens at the earliest possible time to reduce and maintain employee exposures at or below the permissible exposure limit, except to the extent that the employer can establish that such controls are not feasible. In determining the earliest possible time for institution of engineering and work practice controls, the requirement, effective August 27, 1971, to implement feasible administrative or engineering controls to reduce exposures to coal tar pitch volatiles, shall be considered. Wherever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p>	<p>There are no beehive ovens operational in the steel/coke industry and none are expected in the future.</p>

<p>{b} If, after implementing all engineering and work practice controls required by paragraph (f)(1)(iii)(a) of this section, employee exposures still exceed the permissible exposure limit, the employer shall implement any other engineering and work practice controls necessary to reduce exposure to or below the permissible exposure limit except to the extent that the employer can establish that such controls are not feasible. Whenever the engineering and work practice controls which can be instituted are not sufficient to reduce employee exposures to or below the permissible exposure limit, the employer shall nonetheless use them to reduce exposures to the lowest level achievable by these controls and shall supplement them by the use of respiratory protection which complies with the requirements of paragraph (g) of this section.</p>	
<p>(2) <i>Engineering controls - (i) Charging</i> The employer shall equip and operate existing coke oven batteries with all of the following engineering controls, if applicable to the battery designs, to control coke oven emissions during charging operations:</p> <p>{a} One of the following methods of charging:</p> <p>{1} Stage charging as described in paragraph (f)(3)(i)(b) of this section; or</p> <p>{2} Sequential charging as described in paragraph (f)(3)(i)(b) of this section except that paragraph (f)(3)(i)(b)(3)(iv) of this section does not apply to sequential charging; or</p> <p>{3} Pipeline charging or other forms of enclosed charging in accordance with paragraph (f)(2)(i) of this section, except that paragraphs (f)(2)(i)(b), (d), (e), (f) and (h) of this section do not apply;</p> <p>{b} Drafting from two or more points in the oven being charged, through the use of double collector mains, or a fixed or movable jumper pipe system to another oven, to effectively remove the gases from the oven to the collector mains;</p> <p>{c} Aspiration systems designed and operated to provide sufficient negative pressure and flow volume to effectively move the gases evolved during charging into the collector mains, including sufficient steam pressure, and steam jets of sufficient diameter;</p>	<p>This revision recognizes the changes in technology.</p>

<p>{d} Mechanical volumetric Controls on each larry car hopper to provide the proper amount of coal to be charged through each charging hole so that the tunnel head will be sufficient to permit the gases to move from the oven into the collector mains;</p> <p>{e} Devices to facilitate the rapid and continuous flow of coal into the oven being charged, such as stainless steel liners, coal vibrators or pneumatic shells;</p> <p>{f} Individually operated larry car drop sleeves and slide gates designed and maintained so that the gases are effectively removed from the oven into the collector mains;</p> <p>{g} Mechanized gooseneck and standpipe cleaners;</p> <p>{h} {g} Air seals on the pusher machine leveler bars to control air infiltration during charging; and</p> <p>{i} {h} Roof carbon cutters or a compressed air system or both on the pusher machine rams to remove roof carbon if oven heating practices cannot effectively control roof carbon formations.</p>	<p>In some plants, mechanical volumetric controls have been replaced by electronic controls, and flow control is not needed on each hopper in order to achieve the objective of this provision.</p> <p>Mechanized gooseneck and standpipe cleaners have been found to damage batteries, so goosenecks and standpipes may have to be cleaned by other means.</p> <p>Similarly, roof carbon cutters may damage the roof and should not be required where the formation of roof carbon can be controlled effectively through appropriate oven heating practices.</p>
<p>(ii) Coking. The employer shall equip and operate existing coke oven batteries with all of the following engineering controls, if applicable to the battery designs, to control coke oven emissions during coking operations;</p> <p>{a} A pressure control system on each battery to obtain uniform collector main pressure;</p> <p>{b} Ready access to door repair facilities capable of prompt and efficient repair of doors, door sealing edges and all door parts;</p> <p>{c} An adequate number of spare doors available for replacement purposes;</p> <p>{d} Chuck door gaskets to control chuck door emissions until such door is repaired, or replaced</p> <p>{e} Heat shields on door machines.</p>	<p>This revision updates the Standard to reflect new technologies.</p> <p>Heat shields do not reduce employee exposure to coke oven emissions, have been found to be ineffective in protecting against heat, can create “pinch points” in which employees are trapped between the heat shield and the oven, and can be an impediment to proper cleaning of the doors.</p>

(3) Work practice controls - (i) Charging. The employer shall operate existing coke oven batteries with all of the following work practices to control coke oven emissions during the charging operation **if applicable to the battery designs**:

{a} Establishment and implementation of a detailed written inspection and cleaning procedure for each battery consisting of at least the following elements:

{1} Prompt and effective repair or replacement of all engineering controls;

{2} Inspection and cleaning of goosenecks and standpipes as ~~necessary prior to each charge to a specified minimum diameter sufficient~~ to effectively move the evolved gases from the oven to the collector mains;

{3} Inspection for roof carbon build-up ~~prior to each charge~~ and removal of roof carbon as necessary to provide an adequate gas channel so that the gases are effectively moved from the oven into the collector mains;

{4} Inspection of the steam aspiration system ~~prior to each charge~~ so that sufficient pressure and volume is maintained to effectively move the gases from the oven to the collector mains;

{5} Inspection of steam nozzles ~~and or~~ liquor sprays ~~prior to each charge~~ and cleaning as necessary; ~~so that the steam nozzles and liquor sprays are clean~~;

{6} Inspection of standpipe caps ~~prior to each charge~~ and cleaning and luting or both as necessary so that the gases are effectively moved from the oven to the collector mains; and

{7} Inspection of charging holes and lids for cracks, warpage and other defects ~~prior to each charge~~ and removal of carbon to prevent emissions, and application of luting material to standpipe and charging hole lids where necessary to obtain a proper seal.

This revision updates the Standard to reflect new technologies.

Goosenecks and standpipes do not have to be cleaned prior to each charge in order to ensure that an adequate gas channel is available. Similarly, it is not necessary to inspect the oven roof, the steam aspiration system, the steam nozzles and liquor sprays, or the standpipe caps prior to each charge in order to effectively move the gases from the oven to the collector mains. The same is true of inspections of charging holes and lids. This revision, by deleting the requirement that these actions necessarily must be taken prior to each charge, makes the Standard more performance-oriented. Appropriate work practices will still have to be followed in order to ensure that the stringent emission limits of the NESHAP and the PEL are met.

The other revisions in paragraph {5} eliminate the redundant "so" clause and reflect the fact that liquor sprays are alternatives ("or" rather than "and") to steam nozzles.

<p>{b} Establishment and implementation of a detailed written charging procedure, designed and operated to eliminate control emissions during charging for each battery consisting of at least the following elements:</p> <p>—{1} Larry car hoppers filled with coal to a predetermined level in accordance with the mechanical volumetric controls required under paragraph (f)(2)(i)(d) of this section so as to maintain a sufficient gas passage in the oven to be charged;</p> <p>—{2} The larry car aligned over the oven to be charged, so that the drop sleeves fit tightly over the charging holes; and</p> <p>—{3} The oven charged in accordance with the following sequence of requirements: —[i] The aspiration system turned on; —[ii] Coal charged through the outermost hoppers, either individually or together depending on the capacity of the aspiration system to collect the gases involved; —[iii] The charging holes used under paragraph (f)(3)(i)(b)(3)(ii) of this section relidded or otherwise sealed off to prevent leakage of coke oven emissions; [iv] If four hoppers are used, the third hopper discharged and relidded or otherwise sealed off to prevent leakage of coke oven emissions; —[v] The final hopper discharged until the gas channel at the top of the oven is blocked and then the chuck door opened and the coal leveled; —[vi] When the coal from the final hopper is discharged and the leveling operation complete, the charging hole relidded or otherwise sealed off to prevent leakage of coke oven emissions; and —[vii] The aspiration system turned off only after the charging holes have been closed.</p>	<p>Substituting “control” for “eliminate” recognizes that emissions during charging can be controlled but not eliminated entirely. This also gives credence to differences in coke oven designs and eliminates requirements that are not applicable to battery design or battery operations.</p> <p>The other revisions are designed to simplify the Standard, make it more performance-oriented, and eliminate unnecessarily prescriptive operating detail.</p>
<p>{c} Establishment and implementation of a detailed written charging procedure, designed and operated to eliminate emissions during charging of each pipeline or enclosed charged battery.</p>	<p>Paragraph {c} is eliminated because it is redundant of paragraph {b}.</p>
<p>(ii) Coking. The employer shall operate existing coke oven batteries pursuant to a detailed written procedure established and implemented for the control of coke oven emissions during coking, consisting of at least the following elements, if applicable to the battery design:</p> <p>{a} Checking oven back pressure controls to maintain uniform pressure conditions in the collecting main;</p>	<p>This revision updates the Standard to reflect new technologies.</p>

<p>{b} Repair, replacement and adjustment of oven doors and chuck doors and replacement of door jambs so as to provide a continuous metal-to-metal fit;</p> <p>{c} Cleaning of oven doors, chuck doors and door jambs each coking cycle so as to provide an effective seal to control door emissions;</p> <p>{d} An inspection system and corrective action program to control door emissions to the maximum extent possible.</p> <p>{e} Luting of doors that are sealed by luting each coking cycle and reluting, replacing or adjusting as necessary to control leakage.</p>	<p>It is not necessary to clean doors and jambs each coking cycle due to current technology, work and operating practices and environmental standards</p> <p>The requirements of (e) are covered under {d}. Additionally, the revision updates the Standard to existing practices, as luting is not common practice.</p>
<p>(iii) Pushing. The employer shall operate existing coke oven batteries with the following work practices, if applicable to the battery designs, to control coke oven emissions during pushing operations:</p> <p>{a} Coke and coal spillage quenched as soon as practicable and not shoveled into a heated oven; and Actions initiated as soon as practicable to control emissions from coke spillage; and</p> <p>{b} A detailed written procedure for each battery established and implemented for the control of emissions during pushing consisting of the following elements:</p> <p>{1} Dampering off the ovens and removal of charging hole lids to effectively control coke oven emissions during the push;</p> <p>{2} Heating of the coal charge uniformly for a sufficient period so as to obtain proper coking; including preventing green pushes;</p> <p>{3} Prevention of green pushes to the maximum extent possible;</p> <p>{4}{3} Inspection, adjustment and correction of heating flue temperatures and defective flues at least weekly and after any green push, so as to prevent green pushes;</p> <p>{5}{4} Cleaning of heating flues and related equipment to prevent green pushes. at least weekly and after any green push.</p>	<p>The revision updates the Standard to reflect new technologies.</p> <p>Data show that employee exposures are no higher when spillage is shoveled into a heated oven than when the spillage is quenched.</p> <p>Removal of charging hole lids is not an effective means to control pushing emissions.</p> <p>The cleaning of flues weekly is not necessary and is not being conducted. The revisions reflect accepted practices to control heating temperatures.</p>

<p>(iv) <i>Maintenance and repair.</i> The employer shall maintain operate existing coke oven batteries pursuant to a detailed written procedure of maintenance and repair established and implemented for the so as to effectively control of coke oven emissions consisting of through the following elements actions, if applicable to the battery design:</p> <p>{a} Regular inspection of all applicable controls systems, including e.g., goosenecks, standpipes, standpipe caps, charging hole lids and castings, jumper pipes and air seals for cracks, misalignment or other defects and prompt implementation of the necessary repairs as soon as possible.</p> <p>{b} Maintaining the regulated area in a neat, orderly condition so as to minimize the accumulation free of coal and coke spillage and debris;</p> <p>{c} Regular inspection of the control system, e.g., damper system, aspiration system and collector main for cracks or leakage, and prompt implementation of the necessary repairs;</p> <p>{d} Regular inspection of the heating system and prompt implementation of the necessary repairs;</p> <p>{e} Prevention of miscellaneous fugitive topside emissions;</p> <p>{e} Regular inspection and patching of oven brickwork as needed;</p> <p>{f} Maintenance of battery equipment and controls in good working order;</p> <p>{g} { Maintenance and repair of coke oven doors, chuck doors, door jambs and seals;</p> <p>{h} Repairs instituted and completed as soon as possible, including temporary repair measures instituted and completed where necessary. including but not limited to:</p> <p>{1} Prevention of miscellaneous fugitive topside emissions to comply with applicable environmental regulations.</p> <p>{2} Chuck door gaskets, which shall be installed prior to the start of the next coking cycle.</p>	<p>This revision updates the Standard to reflect new technologies.</p> <p>This revision updates the Standard to reflect new technologies.</p> <p>This revision more accurately reflects what is achievable in practice.</p> <p>This revision updates the Standard to reflect new technologies.</p> <p>This revision provides some quantification to this provision.</p>
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<p>(4) Filtered air. (i) The employer shall provide positive-pressure, temperature controlled filtered air for fixed rail production equipment, i.e., the larry car, pusher machine, door machine, quench car cabs, and standby pulpits on the battery topside when operator exposures otherwise would exceed the permissible exposure limit. Where filtered air is required, the ventilation system shall be designed so that at least 10 percent of the air being filtered is make-up air. The operator shall have the ability to activate temperature controls which temper the air inside the car, cab, machine, or pulpit.</p> <p>(ii) The employer shall provide standby pulpits on the battery topside, at the wharf, and at the screening station, equipped with positive pressure, temperature controlled filtered air.</p>	<p>This revision recognizes the practical point that it is impossible to ensure that positive pressure is always maintained, because the doors of these enclosures must be opened periodically in order to perform normal operating duties. A ventilation system that provides at least 10 percent filtered make-up air inside the enclosure is a practical means of preventing seepage of unfiltered air into the enclosure when doors and other major apertures are closed. If more than 10 percent make-up air were required, filtering efficiency could be compromised and contamination levels would rise because the make-up air brought in from outside is more contaminated than the recycled air within the enclosure, which has already been filtered multiple times.</p> <p>Extensive data show that exposures at the wharf and screening station do not exceed the PEL, so standby pulpits are not necessary in those areas. Standby pulpits on the battery topside are now addressed in the preceding paragraph as revised..</p>
<p>(5) Emergencies. Whenever an emergency occurs, the next coking cycle may not begin until the cause of the emergency is determined and corrected, unless the employer can establish that it is necessary to initiate the next coking cycle in order to determine the cause of the emergency.</p>	<p>No revisions are proposed.</p>
<p>(6) Compliance program. (i) Each employer shall establish and implement a written program to reduce exposures solely by means of the engineering and work practice controls required in paragraph (f) of this section.</p> <p>(ii) The written program shall include at least the following:</p> <ul style="list-style-type: none"> {a} A description of each coke oven operation by battery, including work force and operating crew, coking time, operating procedures and maintenance practices; {b} Engineering plans and other studies used to determine the controls for the coke battery; 	<p>No revisions are proposed.</p>

<p>{e} A report of the technology considered in meeting the permissible exposure limit;</p> <p>{d} Monitoring data obtained in accordance with paragraph (e) of this section;</p> <p>{e}(c) For newly constructed batteries, a detailed schedule for the implementation of the engineering and work practice controls required in paragraph (f) of this section; and</p> <p>{f} Other relevant information.</p> <p>(iii) If, after implementing all controls required by paragraph (f)(2) (f)(4) of this section, or after January 20, 1980, whichever is sooner, or after completion of a new or rehabilitated battery the permissible exposure limit is still exceeded, the employer shall develop a detailed written program and schedule for the implementation of any additional engineering controls and work practices necessary to reduce exposure to or below the permissible exposure limit.</p> <p>(iii) (iv) Written plans for such programs shall be submitted, upon request, to the Secretary and the Director, and shall be available at the worksite for examination and copying by the Secretary, the Director, and the authorized employee representative. The plans required under paragraph (f)(6) of this section shall be revised and updated at least every six months to reflect the current status of the program.</p> <p><i>(7) Training in compliance procedures.</i> The employer shall incorporate all written procedures and schedules required under this paragraph (f) in the information and training program required under paragraph (k) of this section and, where appropriate, post in the regulated area.</p>	<p>This provision is addressed in (b).</p> <p>This provision is included in the recordkeeping section of the Standard.</p> <p>This revision updates the Standard.</p> <p>This revision updates the Standard.</p>
<p>(g) Respiratory protection - (1) General. (i) Where respiratory protection is required under For employees who use respirators required by this section, the employer shall must provide and assure the use of respirators which that comply with the requirements of this paragraph (g). Compliance with the permissible exposure limit may not be achieved by the use of respirators except during:</p> <p>(i) (a) During the time pPeriods necessary to install or implement feasible engineering and work practice controls. ; or</p> <p>(ii) (b) In wWork operations, such as maintenance and repair activity, infor which engineering and work practice controls are technologically not feasible.; or (iii) (e) In wWork situations where operations for which feasible engineering and work practice controls are not yet sufficient to reduce employee exposure to or below the permissible exposure limit; or</p> <p>(iv) (d) In eEmergencies.</p>	

<p>(2) Respirator program. The employer must implement a respiratory protection program in accordance with 29 CFR 1910.134(b) through (d) (except (d)(1)(iii), and (f) through (m). (ii) Notwithstanding any other requirement of this section until January 20, 1978, the wearing of respirators shall be at the discretion of each employee where the employee is not in the vicinity of visible emissions. respirators need not be worn in clearly delineated areas where concentrations of coke oven emissions have been shown by air sampling (area or personal) to be below the permissible exposure limit.</p> <p>(3)(2) Respirator Selection. (i) Where respirators are required under this section, the employer shall must select, provide and assure the use of the an appropriate respirators or combination of respirators from Table I below in accordance with 29 CFR 1910.134.</p> <p>(ii) Not later than January 20, 1978, whenever respirators are required by this section for concentrations not greater than 1500 ug/m³, the employer shall provide, at the option of each affected employee, either a particulate filter respirator as provided in paragraph (g)(2)(i)(b) of this section, or a powered air purifying respirator as provided in paragraph (g)(2)(i)(a) of this section.</p> <p>(iii) The employer shall select respirators from among those approved for protection against dust and mist by the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 30 CFR Part 11, except that not later than January 20, 1979, the employer shall select respirators from among those approved by NIOSH for protection against coke oven emissions.</p>	<p>The relevance of the pre-January 20, 1978, provision expired 20 years ago. Respirator usage should not be required in areas where air sampling results consistently show that concentrations of coke oven emissions are below the permissible exposure limit.</p> <p>The reference to Table I is deleted in an effort to simplify the respirator selection process by reference to the generic respiratory protection rule.</p> <ul style="list-style-type: none"> • Twenty years of experience has shown that virtually no employees choose powered air respirators in these circumstances -- or, if they do ask for them initially, they soon give them up because they are heavy and cumbersome. Employers should not have to stock large numbers of these expensive respirators only to have employees quickly abandon them. • NIOSH has never approved respirators specifically for protection against coke oven emissions. The reference to 29 CFR 1910.134 at the beginning of paragraph (g)(2) is all that is needed.
<p>(3) Respirator program. The employer shall institute a respiratory protection program in accordance with § 1910.134 of this part.</p> <p>(4) Respirator usage. (i) The employer shall assure that the model and size of respirator issued to the employee exhibits minimum facepiece leakage and that the respirator is fitted properly.</p> <p>—(ii) The employer shall allow each employee who uses a filter respirator to change the filter elements whenever an increase in breathing resistance is detected and shall maintain an adequate supply of filter elements for this purpose.</p> <p>—(iii) The employer shall allow employees who wear respirators to wash their face and respirator facepiece to prevent skin irritation associated with respirator use.</p>	<p>The standard only needs to refer to 1910.134.</p>

(h) Protective clothing and equipment - (1) Provision and use. The employer shall assure the use of appropriate protective clothing and equipment **based on a hazard assessment pursuant to 1910.132. The assessment is to include such as but not limited to:**

(i) Appropriate flame resistant or retardant jacket, or shirts, and pants, or coveralls, per ASTM D1230-94(2001) Standard Test Method for Flammability of Apparel Textiles;

(ii) Flame resistant or retardant gloves, per 1910.138;

(iii) Face shields or vented goggles or safety glasses with side shields which comply with § 1910.133(a)(2) of this part;

(iv) Footwear providing insulation from hot surfaces for footwear;

(v) Safety shoes which comply with § 1910.136 of this part; and

(vi) Protective helmets which comply with § 1910.135 of this part.

(2) Cleaning and replacement. (i) The employer shall provide the protective clothing required by paragraphs (h)(1)(i) and (ii) of this section in a clean and dry condition at least weekly.

(ii) The employer shall clean, launder, or dispose of protective clothing required by paragraphs (h)(1)(i) and (ii) of this section.

(iii) The employer shall repair or replace the protective clothing and equipment as needed to maintain their effectiveness.

(iv) The employer shall assure that all protective clothing is removed at the completion of a work shift only in change rooms prescribed in paragraph (i)(1) of this section.

(v) The employer shall assure that contaminated protective clothing which is to be cleaned, laundered, or disposed of, is placed in a closable container. ~~in the change room.~~

(vi) The employer shall inform any person who cleans or launders protective clothing required by this section, of the potentially harmful effects of exposure to coke oven emissions.

This revision recognizes a choice in the type of protective clothing and updates the Standard to that of 1910.132.

This revision is for clarification purposes and to reflect new technology for flame resistant materials.

This revision is for clarification purposes.

This revision recognizes that closable container may be located outside the change room, e.g., to receive coveralls that are removed before entering the change room.

<p>(i) <i>Hygiene facilities and practices - (1) Change rooms.</i> The employer shall provide a shower and locker facility clean change rooms equipped with storage facilities for street clothes and separate storage facilities for protective clothing and equipment whenever employees are required to wear protective clothing and equipment in accordance with paragraph (h)(1) of this section.</p> <p>(2) <i>Showers.</i> (i) The employer shall assure that employees working in the regulated area shower at the end of the work shift.</p> <p>(ii) The employer shall provide shower facilities in accordance with § 1910.141(d)(3) of this part.</p> <p>(3) <i>Lunchrooms.</i> When a lunchroom is located in a regulated area, the employer shall provide lunchroom facilities which have a temperature controlled, positive pressure, filtered air supply. Lunchrooms are to be and which are readily accessible to employees working in the regulated area.</p> <p>(4) <i>Lavatories.</i> (i) The employer shall assure that employees working in the regulated area wash their hands and face prior to eating.</p> <p>(ii) The employer shall provide lavatory facilities in accordance with § 1910.141(d)(1) and (2) of this part.</p> <p>(5) <i>Prohibition of activities in the regulated area.</i> (i) The employer shall assure that in the regulated area, food or beverages are is not present or consumed, tobacco smoking products are not present or used, and cosmetics are not applied, except that these activities may be conducted in the lunchrooms, change rooms and showers and other non-regulated areas. required under paragraphs (i)(1) - (i)(3) of this section.</p> <p>(ii) Drinking water and other packaged beverages may be consumed in the regulated area.</p>	<p>This revision better reflects the types of change rooms found at coke plants.</p> <p>This revision clarifies the fact that temperature controlled, positive pressure filtered air is not necessary when the lunchroom is located outside the regulated area. Also, a ventilation system that provides filtered make-up air inside the lunchroom is a practical means of preventing seepage of unfiltered air into the lunchroom when doors and other major apertures are closed.</p> <p>All tobacco products should be prohibited in the regulated area</p> <p>Packaged beverages, as well as drinking water, should be allowed in regulated areas. After all, if an employee can drink bottled water in the regulated area, he or she should be permitted to drink other bottled beverages as well.</p>
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(j) Medical surveillance - (1) General requirements.

(i) Each employer shall institute a medical surveillance program for all employees who are employed in a regulated area at least **240 hours** ~~30 days~~ per **calendar** year.

(ii) This program shall provide each employee covered under paragraph (j)(1)(i) of this section with an opportunity for medical examinations in accordance with this paragraph (j).

(iii) The employer shall inform any employee who refuses any required medical examination of the possible health consequences of such refusal and shall obtain a signed statement from the employee indicating that the employee understands the risk involved in the refusal to be examined.

(iv) The employer shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician, and are provided without cost to the employee.

(2) Initial examinations. At the time of initial assignment to a regulated area or upon the institution of the medical surveillance program, the employer shall provide a medical examination for employees covered under paragraph (j)(1)(i) of this section including at least the following elements:

(i) A work history and medical history which shall include smoking history and the presence and degree of respiratory symptoms, such as breathlessness, cough, sputum production, and wheezing;

(ii) A 14"x17" posterior-anterior chest x-ray, ~~and International Labour Office UICC/Cincinnati (ILO U/C) rating;~~

(iii) Pulmonary function tests including forced vital capacity (FVC) and forced expiratory volume at one second (FEV 1.0) with recording of type of equipment used;

(iv) Weight;

(v) A skin examination;

(vi) Urinalysis for sugar, albumin, and hematuria.

~~(vii) A sputum cytology examination; and~~

~~(viii) A urinary cytology examination.~~

This revision ensures that medical surveillance coverage will be neither over- nor under-inclusive. An employee who spends a small percentage of his or her workday in a regulated area for 30 days per year and accumulates relatively few hours there over the course of the year does not need to be covered by medical surveillance. Conversely, an employee who spends 240 hours per year in a regulated area, but over the course of less than 30 days (working >8 hour shifts), should be covered.

Experience under the Standard has shown that urinary cytology exams provide no benefit in terms of early detection of kidney cancer or bladder cancer in coke oven workers. Urinary cytology should be required only when the employee's urinalysis is positive for hematuria.

These points are discussed in more detail in comments that the American Iron and Steel Institute (AISI) submitted to OSHA on September 20, 1996, on Docket Number S-778.

The requirement for sputum cytology has already been deleted.

(3) Periodic examinations. (i) The employer shall provide the examinations specified in paragraphs (j)(2)(i)-(vi) of this section at least annually for employees covered under paragraph (j)(1)(i) of this section.

~~(ii) The employer shall provide the examinations specified in paragraphs (j)(2)(i) and (j)(2)(iii-vii)(viii) of this section at least semi-annually for employees 45 years of age or older or with five (5) or more years employment in the regulated area.~~

(iii) Whenever an employee who is 45 years of age or older or with five (5) or more years employment in the regulated area transfers or is transferred from employment in a regulated area, the employer shall **make the examinations specified in paragraphs (j)(2)(i)-(vi) of this section available to such an employee who desires to continue to be included in the medical surveillance program at the frequency specified in paragraphs (j)(3)(i) and (ii),** ~~continue to provide the examinations specified in paragraphs (j)(2)(i) and (j)(2)(iii-vii)(viii) of this section semi-annually~~ as long as that employee is employed by the same employer or a successor employer.

(iv) The employer shall provide the x-ray specified in paragraph (j)(2)(ii) of this section at least annually for employees covered under paragraph (j)(3) of this section.

~~(v) (iv)~~ Whenever an employee has not taken the examinations specified in paragraphs (j)(3) ~~(2) (3)(i) (iii)~~ of this section within the ~~six (6)~~ **twelve (12)** months preceding the termination of employment, the employer shall provide such examinations to the employee upon termination of employment.

- As noted above, routine sputum cytology and urinary cytology exams for coke oven workers are not appropriate and should not be required as part of a periodic exam. This is true regardless of the employee's age or years of employment in a regulated area.
- Given the risks associated with chest x-rays, they should not be required at a greater frequency for workers exposed to coke oven emissions than for workers exposed to asbestos.
- More generally, particularly in light of the significant reductions in exposure to coke oven emissions that have occurred since the Standard was promulgated in 1976, annual examinations covering the matters addressed in paragraphs (j)(2)(i) and (j)(2)(iii)-(vi) of the Standard are sufficient to meet the medical surveillance objectives of the Standard. Semi-annual examinations are an unnecessary and expensive burden.

Requiring indefinite medical exams of employees who are no longer exposed to coke oven emissions is of questionable legality. It also is inconsistent with the approach taken in more recently adopted standards, including Benzene, Cadmium, and Asbestos. The requirement should be eliminated or, at the very least, limited to those employees who desire to continue to be included in the program.

This is a simplifying and conforming revision, reflecting the change in the initial medical examination and the switch to annual periodic exams.

<p>(4) <i>Information provided to the physician.</i> The employer shall provide the following information to the examining physician upon request:</p> <ul style="list-style-type: none"> (i) A copy of this regulation and its Appendices; (ii) A description of Information about the affected employee's duties as they relate to the employee's exposure; (iii) The employee's exposure level or estimated exposure level; (iv) A description of any personal protective equipment used or to be used; and (v) Information from previous medical examinations of the affected employee which is not readily available to the examining physician. <p>(5) <i>Physician's written opinion.</i> (i) The employer shall obtain a written opinion from the examining physician which shall include:</p> <ul style="list-style-type: none"> {a} The results of the medical examinations; {b} The physician's opinion as to whether the employee has any detected medical conditions which would place the employee at increased risk of material impairment of the employee's health from exposure to coke oven emissions; and {c} Any recommended limitations upon the employee's exposure to coke oven emissions or upon the use of protective clothing or equipment such as respirators; and {d} A statement that the employee has been informed by the physician of the results of the medical examination and any medical conditions which require further explanation or treatment <p>(ii) The employer shall instruct the physician not to reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure.</p> <p>(iii) The employer shall provide a copy of the written opinion to the affected employee or assure the employee is provided a copy of the written opinion by the examining physician.</p>	<p>The examining physician may already have some or all of this information. Employers should have to provide it only when the physician requests it.</p> <p>The proposed language is a better choice of phraseology.</p> <p>It should not matter who provides the employee with a copy of the written opinion, as long as the employee receives it.</p>
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<p>(k) Employee information and training - (1) Training program. (i) The employer shall institute a training program for employees who are employed in the regulated area and shall assure their participation.</p> <p>(ii) The training program shall be provided as of January 27, 1977 for employees who are employed in the regulated area at that time or at the time of initial assignment to a regulated area.</p> <p>(iii) The training program shall be provided at least annually for all employees who are employed in the regulated area. except that training regarding the occupational safety and health hazards associated with exposure to coke oven emissions and the purpose, proper use, and limitations of respiratory protective devices shall be provided at least quarterly until January 20, 1978.</p> <p>(iv) The training program shall include informing each employee of:</p> <p>{a} The information contained in the substance information sheet for coke oven emissions (Appendix A);</p> <p>{b} The purpose, proper use, and limitations of respiratory protective devices required in accordance with paragraph (g) of this section;</p> <p>{c} The purpose for and a description of the medical surveillance program required by paragraph (j) of this section including information on the occupational safety and health hazards associated with exposure to coke oven emissions;</p> <p>{d} A review of all written procedures and schedules required under paragraph (f) of this section; and</p> <p>{e} A review of this Standard.</p> <p>(v) After the initial year of employment in a regulated area, in lieu of providing the annual training specified in paragraph (k)(1)(iv) of this section, the employer may provide the employee training tailored to address specific deficiencies or to improve coke oven emission control practices.</p> <p>(vi) Employees who are due for retraining and who have continuously worked in a regulated area for at least one year will be provided the option of testing out of the requirement for training. That is, if an employee can demonstrate the similar competence expected of an employee after participating in annual training on the Coke Oven Standard without being training, no annual retraining is required.</p> <p>(2) <i>Access to training materials.</i> (i) The employer shall make a copy of this Standard and its appendixes readily available to all employees who are employed in the regulated area.</p> <p>(ii) The employer shall provide upon request all materials relating to the employee information and training program to the Secretary and the Director.</p>	<p>The January 27, 1977, date is no longer relevant.</p> <p>The pre-January 20, 1978, requirements are no longer relevant.</p> <p>This revision reflects the fact that, after receiving the initial year's training, annual refresher training can more usefully be tailored to addressing specific deficiencies in the employee's work practices and emission control procedures. Training that has to cover the same points year after year is likely to be less meaningful, less well-received, and less effective in teaching the things that are most important for the protection of the particular employees.</p>
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<p>(1) Precautionary signs and labels - (1) General.</p> <p>(i) The employer may use labels or signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs and labels required by this paragraph.</p> <p>(ii) The employer shall assure that no statement appears on or near any sign required by this paragraph which contradicts or detracts from the effects of the required sign.</p> <p>(iii) The employer shall assure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.</p> <p>(2) Signs. (i) At the main access to the coke oven battery, the employer shall post signs bearing the legend:</p> <p style="text-align: center;">DANGER CANCER HAZARD AUTHORIZED PERSONNEL ONLY NO SMOKING OR EATING IN REGULATED AREAS</p> <p>(ii) In addition, not later than January 20, 1978, The employer shall post signs in the areas that indicate where the permissible exposure limit is exceeded bearing the legend:</p> <p style="text-align: center;">DANGER RESPIRATOR REQUIRED</p> <p>Where the permissible exposure limit is exceeded, the employer may simply include the words RESPIRATOR REQUIRED on the sign posted pursuant to paragraph (1)(2)(i).</p> <p>(3) <i>Labels.</i> The employer shall apply precautionary labels to all containers of protective clothing contaminated with coke oven emissions bearing the legend:</p> <p style="text-align: center;">CAUTION CLOTHING CONTAMINATED WITH COKE EMISSIONS DO NOT REMOVE DUST BY BLOWING OR SHAKING</p>	<p>This revision clarifies where signs are to be posted.</p> <p>The pre-January 20, 1978, grace period expired long ago.</p> <p>This proposed wording would be consistent with other standards and simplify compliance.</p>
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<p>(m) <i>Recordkeeping - (1) Exposure measurements.</i> The employer shall establish and maintain an accurate record of all measurements taken to monitor employee exposure to coke oven emissions required in paragraph (e) of this section.</p> <p>(i) This record shall include:</p> <p>{a} Name, social security number, and job classification of the employees monitored;</p> <p>{b} The date(s), number, duration and results of each of the samples taken, including a description of the sampling procedure used to determine representative employee exposure where applicable;</p> <p>{c} The type of respiratory protective devices worn, if any;</p> <p>{d} A description of the sampling and analytical methods used and evidence of their accuracy if such methods differed from the guidelines set forth in Appendix B to § 1910.1029 of this part; and</p> <p>{e} The environmental variables that could affect the measurement of employee exposure.</p> <p>(ii) The employer shall maintain this record for at least 40 years or for the duration of employment plus 20 years, whichever is longer.</p>	<p>If the guidelines set forth in Appendix B to the Standard are followed, a description of the sampling and analytical methods used and evidence of their accuracy amounts to unnecessary paperwork.</p>
<p>(2) <i>Medical surveillance.</i> The employer shall establish and maintain an accurate record for each employee subject to medical surveillance as required by paragraph (j) of this section.</p> <p>(i) The record shall include:</p> <p>{a} The name, social security number, and description of duties of the employee;</p> <p>{b} A copy of the physician's written opinion;</p> <p>{c} The signed statement of any refusal to take a medical examination under paragraph (j)(1)(iii) of this section; and</p> <p>{d} Any employee medical complaints related to exposure to coke oven emissions.</p>	<p>No revisions are proposed.</p>

<p>(ii) The employer shall keep, or assure that the examining physician keeps the following medical records,</p> <ul style="list-style-type: none"> {a} A copy of the medical examination results including medical and work history required under paragraph (j)(2) of this section; {b} A description of the laboratory procedures used and a copy of any standards or guidelines used to interpret the test results; {c} The initial x-ray; {d} The x-rays for the most recent five (5) years; {e} Any x-ray with a demonstrated abnormality and all subsequent x-rays; {f} The initial cytologic examination slide and written description if any; {g} The cytologic examination slide and written description for the most recent 10 years; if any and {h} Any cytologic examination slides with demonstrated atypia, if such atypia persists for 3 years, and all subsequent slides and written descriptions. <p>(iii) The employer shall maintain medical records required under paragraph (m)(2) of this section for at least 40 years, or for the duration of employment plus 20 years, whichever is longer.</p>	<p>These revisions reflect the elimination of mandatory sputum and urinary cytology exams in paragraph (j).</p>
<p>(3) <i>Availability.</i> (i) The employer shall make available upon request all records required to be maintained by paragraph (m) of this section to the Secretary and the Director for examination and copying.</p> <p>(ii) Employee exposure measurement records and employee medical records required by this paragraph shall be provided upon request to employees, designated representatives, and the Assistant Secretary in accordance with 29 CFR 1910.20(a)-(e) and (g)-(i).</p> <p>(4) <i>Transfer of records.</i> (i) Whenever the employer ceases to do business, the successor employer shall receive and retain all records required to be maintained by paragraph (m) of this section.</p> <p>(ii) Whenever the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, these records shall be transmitted by registered mail to the Director.</p>	<p>No revisions are proposed.</p>

<p>(iii) At the expiration of the retention period for the records required to be maintained under paragraphs (m)(1) and (m)(2) of this section, the employer shall transmit these records by registered mail to the Director or shall continue to retain such records.</p> <p>(iv) The employer shall also comply with any additional requirements involving transfer of records set forth in 29 CFR 1910.20(h).</p>	
<p>(n) <i>Observation of monitoring - (1) Employee observation.</i> The employer shall provide affected employees or their representatives an opportunity to observe any measuring or monitoring of employee exposure to coke oven emissions conducted pursuant to paragraph (e) of this section.</p> <p>(2) <i>Observation procedures.</i> (i) Whenever observation of the measuring or monitoring of employee exposure to coke oven emissions requires entry into an area where the use of protective clothing or equipment is required, the employer shall provide the observer with and assure the use of such equipment and shall require the observer to comply with all other applicable safety and health procedures.</p> <p>(ii) Without interfering with the measurement, observers shall be entitled to:</p> <ul style="list-style-type: none"> {a} An explanation of the measurement procedures; {b} Observe all steps related to the measurement of coke oven emissions performed at the place of exposure; and {c} Record the results obtained. <p>(o) <i>Effective date.</i> This Standard shall become effective January 20, 1977.</p> <p>(p) <i>Appendices.</i> The information contained in the appendices to this section is not intended, by itself, to create any additional obligations not otherwise imposed or to detract from any existing obligation.</p>	<p>No revisions are proposed.</p>